

**ARMED FORCES INSTITUTE OF PATHOLOGY
ORAL HISTORY PROGRAM**

SUBJECT: Dr. Robert E. Stowell

INTERVIEWER: Charles Stuart Kennedy

DATE: March 16, 1992

Q: Dr., I wonder could you give me a little about your background, when you were born, where you born, and a little about your education before we get to the subject at hand.

DR. STOWELL: Yes, well, I was born in Cashmere, Washington, a small town near Wenatchee, Washington, on December 25, 1914. I lived in the State of Washington all the time until I went away to college. My mother and father both spent part of their time as teachers, and I grew up during the Great Depression. I was the only one of my classmates to go away to college, but it isn't such a big deal when you realize that there were only thirty students in our high school graduating class in 1932.

Q: But still. Did you come from sort of what I call the interior of Washington, farming community?

DR. STOWELL: Yes, north central, farming, apple-growing areas. I grew up most of the time in Okanogan, Washington, which is on the Okanogan River, about fifty miles from the Canadian border.

My first year, I went to Whitman College in Walla Walla, Washington. Fortunately, I was able to go there because I had a tuition scholarship. I had a job for my room, cleaning the dormitory that I lived in, and I worked in a cafeteria for most of my meals. So I got by on expenses of slightly over \$300 the first year. Near the end of my first year, an uncle, who was a college professor, died and left his money in a trust fund for the college education of his nephews and nieces. I was the only one to ever be able to take advantage of that. After that first year, I transferred from Whitman to Stanford University, and through this trust fund, I was able to get my board, room, and tuition paid, provided I made high academic grades. And I worked hard to be sure I did that.

Q: What were you pointed towards as you were moving into college?

DR. STOWELL: Either law or medicine. I had an interest in science, and I think this was one of the things that encouraged me in the direction of medicine.

After three years I graduated from Stanford University in 1936 and went on to Stanford Medical School. When I graduated from Stanford Medical School, I took a job for two years as a research assistant at the Barnard Free Skin and Cancer Hospital in St. Louis, Missouri, where I worked with an internationally known cancer investigator. After two years, I decided I'd better get on with my further medical training. At first I considered going into surgery, and was actually accepted for a resident position in surgery

at Peter Bent Brigham Hospital in Boston. But they couldn't take me for the first six months because the positions were all filled. They told me that there was a very good program in pathology at Washington University in St. Louis and suggested I might take six months in pathology. But instead of taking only six months, I just stayed on in pathology.

Q: Was this your scientific bent sort of kicking in here that brought you into this?

DR. STOWELL: Yes, and an interest in research. I thought I would have better opportunities for research in pathology than I would in surgery, although obviously all of the areas do a lot of research. And I was working with people in the Barnard Free Skin and Cancer Hospital who were associated with the pathology department. So I went into the pathology department and moved up to the position of chief resident in pathology in 1943.

This was during the World War, and a lot of the staff were away. In fact, one of the things I was going to bring up is ways in which civilians interacted with what is now AFIP. A number of the outstanding civilian pathologists went as consultants to the Army Medical Museum for a period of three months or so.

Q: This was particularly during World War II you're talking about.

DR. STOWELL: Yes, not World War I, World War II.

Q: You would have been a little young.

DR. STOWELL: My chief of pathology, Dr. Robert Moore, went to the Army Medical Museum, predecessor of AFIP, for three months. In the absence of all senior staff, as chief resident, I became acting chairman of the department of pathology, one of the major departments in the country. When he returned after three months, I was working in my office at ten o'clock at night, and I looked up and there was Dr. Moore. And I said, "Am I glad to see you, Dr. Moore!"

And he said, "Why?"

And I said, "Well, it's just great to have you back."

"Well," he said, "I've been making some inquiries and things have run so well that I'm going back to the Medical Museum for another three months."

So I stayed as acting departmental chair. It was not a very onerous job; the department was so well organized that it almost ran itself. I stayed on in the department for a time and moved up to the rank of assistant professor, and associate professor. While at Washington University I obtained a PhD degree in pathology in 1944 and spent a year at the Institute for Cell Research in Stockholm in 1946-47 as an Advanced Medical Fellow of the Commonwealth Fund.

Then in 1948 I was offered a position in Kansas City at the University of Kansas, where they wanted to start a cancer research program. I was director of cancer research,

and we founded the department of Oncology, of which I was chairman. After two years at that, the chairman of the department of pathology retired and I took over the chairmanship of pathology, and built up a very fine Department of Pathology and Oncology.

During the course of this, I was active with consulting and research at the national level with NIH, AFIP and other groups. And in 1959 I was offered the position of scientific director at AFIP, which I accepted.

Q: This was in 1959.

DR. STOWELL: Yes, 1959.

Q: I'd like to go back a bit, just to get a feel for this. When you started moving into pathology, were there pressures on you from other doctors, your colleagues, saying, "Why are you going into pathology?" or "Gee, pathology's a good field," or "You'd make more money somewhere else."? What were some of the pressures and some of the drives towards moving a young man with medical training, who could have, say, gone into surgery, to go towards pathology? And what were some of, you might say, the roadblocks?

DR. STOWELL: Well, the people I was working with at the Barnard Free Skin and Cancer Hospital were very anxious to see me go into pathology. An older woman, a very expert dermatopathologist, was also on the staff at Washington University, in pathology, and she was very anxious to see me go into pathology. And I think, while I looked at it and compared the potential careers in pathology and in surgery, I felt that I'd have a better chance of doing more research in pathology. I felt that the competitive pressures perhaps would not be as great in pathology as they would be in surgery. I don't think pathologists are as aggressive as surgeons. We used to say if you'd take a picture of a class of medical students, those in the front row are going into surgery. And when I counted up the years before I could become Board-certified, I figured I could do it in pathology a little faster than I could in surgery. I felt I'd probably get on with my career a bit sooner in pathology than I would in surgery. And I'd never had a really strong interest in clinical practice. The idea of having to bill patients for what I'd do for them didn't appeal to me, and you didn't have to do this as much in academic pathology.

Q: Do you find that there is...it sounds terrible the way I'm putting it...a pathological type? A pathologist type? Is there something different about them?

DR. STOWELL: They tend to have, I think, a deeper interest in basic sciences. They tend to be interested in knowing about the cause of things, why things happen, why diseases produce the lesions they do in patients. Actually, I worked with groups that surveyed American pathologists and published a report on it in 1973, and there are a number of interesting little side things. For example, doctors who went to sanitaria for

tuberculosis often ended up in pathology. Because as their health improved, they wanted to do something and they would work in the pathology laboratory and decide to go into pathology.

Pathology had another advantage also that appealed to me, and that is, very few night calls. You work in the day times and you don't get called out of bed in the middle of the night to attend to medical emergencies.

Q: And I suppose, today, the malpractice business, the lack of having that hanging over your head.

DR. STOWELL: Yes. Pathologists do have to have malpractice insurance of one kind or another, but it's not nearly as bad for pathologists as it is for certain types of surgeons and anesthesiologists.

Q: Now, back to 1959. I wonder, could you describe what your job was when you got to the AFIP, and also what the situation was there as you saw it at that time?

DR. STOWELL: A published description of my position said:

The Scientific Director is responsible for directing and coordinating the professional research, and teaching functions of the Institute. He maintains liaison with civilian research institutes and foundations, sets professional standards, and advises The Director on professional matters.

Well, it was, of course, as it is now, the world's largest pathology institute in terms of human materials, and there was a large staff. I had some difficulty figuring out exactly what I was going to be doing myself, because I wouldn't have any budget, and I didn't know just how I would operate without a budget. But I was assured by the administration that that wouldn't be a problem, that there would be money available within the general budget to do whatever was necessary.

The person who was leaving as director was Captain Silliphant, in the Navy. He had two deputy directors. One of them was Frank Townsend, and Frank Townsend and I had been together in 1945 when I was assistant professor and he was a resident in pathology at Washington University in St. Louis. And when I moved to Kansas City in 1948, although he was up in Nebraska, he would come down one or two days a month to teach, so he was on my voluntary teaching staff at the University of Kansas, and we sort of kept in touch. And the other deputy was Colonel Joe Blumberg, and I had known Blumberg through associations with pathology organizations. I was a consultant at AFIP before I joined the staff, so I knew these two people. They talked of their interest in things that interested me, too, and that they wanted to build up the research program.

There was a lot of important research on case studies and human diseases going on, but not very much experimental pathology. There was one electron microscope, that worked some of the time. In 1965 we had five electron microscopes, and we had a well-organized program, and we were able to bring in other new research technologies .

Q: How would you bring in new technology? Obviously this costs money, but were you able to parley the prestige of the AFIP to perhaps get equipment sort of on a test or a loan basis or anything like that?

DR. STOWELL: No, we didn't do that so much. We brought in people who were recognized experts with certain types of equipment and some of the newer technologies, and then the equipment would be found to provide for them, and this would lead to the development of programs. I was chairman of the Personnel Committee, and therefore I was able to assist in getting good caliber scientists to come to AFIP. We had something of a problem then, as they have now very much, and that is, the limitations of professional salaries from government. So that people didn't come for the money, they came for the opportunities.

Q: Would you find then that you wouldn't keep people too long, that they would come and work, but then move on? Was this sort of the pattern?

DR. STOWELL: To a degree, yes, but most of them would stay for a number of years, and some, who had good positions and good research opportunities, would stay much longer. Some of the people that I helped recruit in 1959-67 are still at AFIP.

Q: When you arrived and you were working on research, where did you see the areas of strength and weakness in the research field?

DR. STOWELL: Well, one great area of strength (which I did very little to enhance) was in the area of human disease case studies. They had many competent senior pathologists, and these senior pathologists were there because they could get more material there than they could get anyplace else, and therefore they had a very good opportunity to collect a series of cases, study, and analyze them. There were good facilities for statistical analysis and for follow-up on patients that they could use. They had good illustration facilities and fairly adequate secretarial service. But it was a good place for a person who really was dedicated and wanted to study human disease, using case materials. It was a very good place for them.

Q: This was because of referrals?

DR. STOWELL: Referrals from the civilian sources, and the material that came there, particularly from the Army, the Veterans Administration Hospital, and also from the Navy and Air Force. So they had a large cross-section of material. And during the time that I was there, we expanded the material that came from overseas, in part in connection with geographic pathology programs that I can talk more about later.

There was not a lot of what I would call basic research going on, but they were interested in developing that. And Frank Townsend and Joe Blumberg didn't stand in my way in terms of trying to develop these areas.

Q: When you talk about basic research, what are you referring to?

DR. STOWELL: Well, for example, I mentioned electron microscopy, in which you carry beyond light microscopy the depth to which you can go and study the structure and ultrastructure of tissues and of diseases. They had a good program in histochemistry. And they already had a good program in terms of proportional staining of microscopic slides.

But we got into other things. I was personally interested, for example, in the effects of cold on tissue, exposing tissue to cold under different conditions, what it did to the tissue itself, what artifacts it produced, and what changes it didn't produce.

Also we set up a program on studying the effects of laser energy on tissues, because that was of some potential military interest. So we studied what exposing tissues to lasers under different conditions did to the structure and nature of the tissue.

We got a very good biochemist who could carry out biochemical analyses of tissues following the effects of various treatments and diseases. He also developed some programs of his own.

One of the things that I wasn't aware would be valuable but turned out to be quite valuable was during the time they were many young physicians coming into the military service because of the draft. Blumberg and Townsend both consulted with their surgeon general's office about assignments of pathologists in their services. Particularly in working with Joe Blumberg, we were able to get the cream of the crop coming in who had research background, and bring them to AFIP for a period of a couple of years. They helped a lot in terms of the research program, as well as in some cases serving in the diagnostic service, too.

Q: Did you find research sort of depended on what the mix was of pathologists at the Institute? Were people sort of following their own bent, or were you directing it more?

DR. STOWELL: A bit of both, as it were. When people came there, they had areas of their own research interests. In some cases, they were able to continue these. Very often, however, they were assigned to a laboratory which had an ongoing program, and they would apply their special expertise to some aspect of that ongoing research program.

Q: At the time, how did you feel the AFIP fit as a military institute? Here you came, out of the civilian field, and it was the Armed Forces Institute of Pathology, how did you find military rule fit into this? Was it a problem at all?

DR. STOWELL: Well, it was a problem in certain ways. In other words, you couldn't do things exactly the way you had done them in civilian life. All the same doors were not as readily opened to you as they had been in civilian life. On the other hand, there were some other doors that were opened. It took me a while, as it took everyone else a while, to learn the military way of doing things, and the chain-of-command, as it were. It took a

while to get used to this at AFIP, as well as to get used to how things operated in Washington. I'd had considerable experience on the civilian side before, I'd been a consultant at NIH, I'd been chairman of the Pathology Study section and things of that kind, but I had had very little contact with the military.

Q: Did you have the feeling that you were in competition with NIH or the Naval medical establishment in Bethesda?

DR. STOWELL: Well, we were in competition in certain ways, yes. NIH, for example, had much superior funding for carrying on their research than we had at AFIP, but through connections and my experience at the NIH, we were able to get some of their support and their assistance for some of our programs. And comparatively we had very limited research personnel. We had one or two NIH staff people that would be assigned to work at AFIP, so we had liaison with some of these people. We were not nearly in as good a position to go to agencies like the American Cancer Society to get money as we were in civilian institutes, although we were able, nevertheless, to get some. And as we go on, I can explain more as to how that operated and some of the problems it created and so on.

As I mentioned, during the eight years I was at AFIP, through the cooperation of many, many people, the outside support of research increased more than tenfold and our educational programs more than doubled. In 1959 there was only one very large supporting grant from outside sources. I say "outside sources," the research on case studies and all that was supported directly by AFIP budget, but there was not a lot of other money to support other types of programs. Townsend, through the Air Force, had obtained, I think, approximately a hundred thousand dollars a year to carry on some aerospace studies of Air Force interest. But we were able, over a period of time, to get research monies from federal agencies of the Department of Defense, from the NIH, the American Cancer Society, and other sources to open up new programs that we could carry on. Through this way, and with getting expert scientists who were well-qualified to carry on research (in many cases their expertise was known before they came to AFIP; you have to have good staff, good scientists to get research money), we were able to build up the outside support of research.

Q: Did you have a problem, which I would think would occur, when you'd go to a foundation or something and say, "We need this," and they'd say, "Well, you know, you're part of the Department of Defense. Kansas State has got a program there and they don't have the money, but you're military, you can get as much as you want."?

DR. STOWELL: Yes, I encountered this. You had to explain to anyone to whom you went for money why the federal government couldn't support what we were asking for money to do. We were able to do this by explaining that there was a limit to the money, and that this was an area in which there was no money budgeted in the Department of Defense to carry it on. We didn't ask for a lot of equipment from outside sources, because

we could usually get equipment money from DOD. Plus the fact that if the Cancer Society gives money to a university for equipment, they know the equipment will continue to be used there. But it's hard to explain why they should buy equipment for an agency of the federal government. There were problems, which I will get into, in terms of the administration of outside research monies.

I'd like to comment a little bit on the importance of civilian medicine in the development of AFIP. Not that this isn't recognized, but I think if one is considering history, you're going to hear plenty about the military importance and how the military has done a good job of administering the AFIP, but as you look back over the years, there are many ways in which civilians have been important.

One of the important ways is when AFIP gets in trouble, the civilians can lobby Congress, and the military people cannot effectively do this.

In World War II, as I mentioned, a very significant amount of the staffing at the Army Medical Museum was from outside people who came for short periods of time as consultants. They wouldn't have had adequate senior staff to take care of material if it hadn't been for their civilian consultants.

The registries of pathology have been a very important liaison activity. It's been important to AFIP, and it's been important to civilians. For example, the American College of Radiology has supported the Radiology Registry for decades, and they support it very liberally. And it's the only training program of its kind where radiologists who are in training can come for a period of months and study a well-organized collection of x-rays and tissue specimens, and study the relationship between these. They regard this as an extremely important thing in the training of their radiologists, so they are very supportive and appreciative of the Radiology Registry.

The first registry was established by the American Academy of Ophthalmology organization. Perhaps to a lesser degree now, but they used the expertise of the ophthalmologic pathologists to assist in diagnosing unusual eye diseases, and many specimens were submitted.

Another example is in the field of leprosy. The AFIP has the world's largest collection of leprosy specimens. And they have carried on some very important investigations on the disease of leprosy and in producing materials that could be used for vaccination and so on for leprosy.

This is one of the kinds of things that you have trouble explaining to the military. Why is this being done at AFIP? Well, it's being done because of the people that were there. A Public Health Service officer, Chapman Benford, was one of the leading investigators in leprosy in the world, and for a number of decades he was at AFIP and set up the collection of this material. So the Leonard Wood Memorial and other leprosy organizations were very supportive of the geographic pathology and the leprosy registries.

There are many other registries, but those are three examples where they carried on something that was rather unique and important to civilian medicine.

Also, of course, the Department of Army civilians that work at AFIP, and have for generations, although not perhaps in as high a proportion now as they used to be, but they make a very important and continuing contribution. Right now, of course, they're hoping

to get a new building for AFIP. And if this is accomplished, the civilian people who can lobby Congress will play a very important role in that.

A small thing, but that to me was of some importance, was this further example of interaction between the different agencies and civilian people. In 1953, NIH held a conference on increasing research potential in pathology, of which I was one of the participants. Harold Stewart and Alan Moritz were among the main organizers of this. After the conference was over, we had a large number of recommendations of things to be done, and Alan Moritz, who was chairman of the study section, turned to me and said, "Bob, I'll appoint you chairman of the committee to see that these things get done. You get whatever people you need to help."

One way we started out was by establishing an Intersociety Committee for Pathology Research, with representation from the five major national pathology societies. This committee did a lot of things, but among other things, we were able to apply to NIH and get some grants to support our activities. When I went to AFIP, because of these past connections, I was able to get some of this money funneled to AFIP, where we established several programs.

We prepared a catalogue of teaching aids for pathology, and had this published as well as having the material available for loan at AFIP. We purchased motion picture films that were of value in teaching. The committee would buy the film and give it to AFIP, where it would be in the Medical Illustrations Service, and where civilians as well as other people could borrow the films.

We set up an advisory committee for a Registry for Noteworthy Research in Pathology. We felt that AFIP would be a very good place to collect example materials of outstanding research that had been done anyplace in the country and have them kept there for future study. The travel monies for the three members who served on this committee were paid through this grant that the Intersociety Committee had.

One example, which still is being utilized, is the chicken that had Rous sarcoma, the first example of a tumor in animals that was shown to be caused by a virus. I was able to go to the Rockefeller Institute in New York and talk to Peyton Rous and get this chicken and bring it back to AFIP, where it is still frequently on display as the first example of a tumor caused by a virus.

Through the Intersociety Committee and cooperation with AFIP, we set up another small program, which operated for about five years, in which the committee would offer to pay half the expenses of the outstanding medical student in pathology in each medical school to come to Washington for two days, to visit AFIP and also NIH and see a bit of the Washington scene of things. This was quite popular with the students, and at the same time it was a good thing, I think, that they got to see how some of the government agencies, including AFIP, operated, and that it really wasn't a place that only did things of military concern.

An interesting thing developed over a period of time in the relationships between the registries and the National Research Council. When the first registry was established, it was said that the registrar carried the money for the registry around in one pocket, and his own money in the other pocket. Well, they decided that wasn't a good way to do

business, so they got the National Research Council to agree to handle the financial things relating to the Ophthalmologic Registry, and that relating to other registries as they were established.

And when it came to publication of the Atlas of Tumor Pathology, which is a very widely circulated and widely used leading series of reference books on cancer, the authors wanted to use materials at AFIP. Civilians did most of the writing of various fascicles, but they wanted to use the collected materials at AFIP. And then, when it came to publication, they decided to see if they could get the government printing presses to do it.

Well, the government printing presses botched the printing of the first fascicle of the Atlas so badly that all copies had to be junked, and then they got presses for AFIP. And the fascicles have continued on to be printed on the AFIP presses.

But Keith Cannon, a very astute Scotsman who was Medical Director for the National Research Council, began to get uneasy about all these things that they were being asked to do, and he didn't really understand what was going on. When I came there and we started getting grants from the American Cancer Society and NIH, again, the monies for these were handled through the National Research Council.

The Atomic Bomb Casualty Commission had got the materials from autopsies done on the Japanese people, from the atomic bomb explosions there, and the materials came to this country, and for a safe repository they were at AFIP, where they could be studied by anyone who wanted to study the materials. This got to be a hot potato, because the Japanese decided they didn't want their ancestors' materials kept in a military institution in Washington, they wanted them returned to Japan. And that was done, but it put Keith Cannon and the National Research Council sort of in a hot spot. So he began to say, "Look, there must be some other mechanism established to do the things the National Research Council is doing for AFIP."

One incident happened that was quite upsetting to Keith Cannon. The AFIP would buy things and then give the bills to the National Research Council to pay. Joe Blumberg, as director, decided that he needed a new snowplow to plow the sidewalks at AFIP, and the easiest way to get it was just to order it through the registry. Well, Keith Cannon really hit the fan, as it were, on that one.

So we started to cast around as to what we could do, and we decided (principally Joe Blumberg and I, discussing things) we would set up something patterned after Oak Ridge.

Q: Oak Ridge being a nuclear research center.

DR. STOWELL: Yes, and it has a sponsoring group of universities. We thought that universities would be much more stable sponsors than individuals and societies would be. So we developed this idea, and I went to some of my civilian friends and got them to front for it. We started with representatives from three universities: Tom Kinney from Duke University; Ken Brinkhous from the University of North Carolina; and Bob Webster from the University of Chicago, and we drew up bylaws and necessary papers in my office, and established the Universities Associated for Research and Education in

Pathology (UAREP).

At that time, I was president of the American Society for Experimental Pathology, and we were just setting up an office at the Federation of American Societies of Experimental Biology headquarters in Bethesda, and we therefore were able to move the UAREP office in with the American Society for Experimental Pathology office. We paid part of the salary for a financial officer, and Experimental Pathology paid the rest, and this made really a very nice relationship for both organizations.

Although when one of the attorney types from the Department of Defense asked me to explain how this all worked, he commented, well, it sounds like a conflict of interest to him; it might be good for American medicine, but...

Anyway, Universities Associated for Research and Education in Pathology was established and ran quite well for a time.

Q: I'd like to just return, for somebody who is not familiar with the problem, and maybe this is not the problem, but my understanding is that one of the reasons you had to have a separate institution was that in the normal course of affairs at that time, anything that was generated, if you sold your atlases, any money that came in went into the General Treasury, and there was no way of saying, gee, we earned that money, we get to use it. Was that part of the problem?

DR. STOWELL: That was part of the problem. The other part was that the government doesn't ordinarily get involved in the business of writing checks on civilian money, so we had to have another mechanism to administer this.

Another problem that came up was in connection with the Atlas of Tumor Pathology, because the civilian authors often drug their feet in terms of sending in their materials. General Blumberg's wife, Kay Blumberg, was the editorial secretary, and she had her office there at AFIP. She was a very good editorial secretary, and she was very strict in wanting to have good uniformity of style and quickly relating to the publications. And when she would edit these manuscripts and send them back to the authors, some of them, being very independent individuals, were upset with her editing style. As they get to the last few volumes of the atlas, it always drags out. The last authors are always procrastinators, and it's just difficult to get their material submitted. Keith Cannon was very businesslike with all these fascicles coming out--every so many months, another fascicle--and he would order, as it were, Kay Blumberg to deliver those fascicles. And when she couldn't do it exactly on his schedule (it wasn't humanly possible), he wanted to fire her. Well, here you have the situation where Keith Cannon was wanting to fire the wife of the director, and this didn't make a very happy kind of a situation. We finally came to the end of that first series. She'd had enough of it by then, and we did get a different editor after that.

This produced problems, so that we did have to get a different mechanism, and UAREP was established.

I'll come back to UAREP later, but another thing I became involved in related to the medical museum building on the Mall, called the Old Red Brick Building. A chap

named Hirshhorn, who was an immigrant in New York, accumulated a tremendous amount of money and used part of it to buy art (which some people said wasn't very good art). But Mr. Hirshhorn was a very forward-looking man and he decided he wanted his place in eternity by having his art in a prominent building in Washington.

By what mechanism, I don't know, but he got access to Lady Bird Johnson and convinced her that it would be a great thing if this art was added to the other art that was in Washington already.

Also, he became friendly with I. Dillon Ripley, Secretary of the Smithsonian Institution. As the legend tells it, they were driving around Washington, looking for a possible place that a building could be constructed, and the director of the Smithsonian pointed out the Armed Forces Medical Museum. (He didn't point out any of *his* adjacent buildings that could be leveled.) But he said, "Well, now there's a building, that could probably be taken down and then you could have your museum on the mall."

Well, AFIP, of course, didn't like that idea at all, but their commander in chief, President Johnson, decided that that AFIP building should go and the Hirshhorn Museum should be there in its place. Well, of course, then what could AFIP do about it? It didn't seem that they could do a great deal. But Joe Blumberg was on the National Cancer Council as representative of the Department of Defense at the time. And a New York philanthropist, Mary Lasker, was also a civilian on this council. She offered to pay the cost of hiring a lobbyist, who had done a great deal of lobbying for NIH, by the name of Luke Quinn.

So Blumberg asked me to work with Quinn. He explained, and very understandably to me, that he couldn't do anything himself because he had to follow his commander's orders as to what was to be done.

Q: Lady Bird Johnson was the wife of the president of the United States, who was a very forceful man in his own right and a very powerful figure. You didn't challenge him.

DR. STOWELL: No, that was not to be done, particularly by the military.

Well, I worked with Luke Quinn for many months on this, and it was a very liberal education for me, because he really knew how to do things. The big problem was: Where was the museum going to move? The Department of Defense was told to find a place. So they came up with a suggestion of an old temporary building at the Naval Observatory grounds. And AFIP had no choice but to say, well, yes, it could do, it could be fixed up.

But Luke Quinn went there with me and we looked around the building, which was dilapidated, and over in one corner we found a lot of destruction and droppings from termites. So he got a press photographer to come and take photographs of the building, including very precise pictures of these termite wings and droppings, and he had copies made and sent copies to all of the members of the Public Works subcommittee on Public Buildings and Grounds were considering this problem. Well, that took care of the problem of that Naval building.

The Smithsonian suggested that the Medical Museum could be moved into a part

of one of their older industrial buildings. Not only were their suggested areas unsuitable for medical exhibition but there was a probability that over time the AFIP would lose control and identity of its museum. Quinn was a friend of the postmaster general, and he continued, with the connections that he had, to try to stop the Hirshhorn Museum from going into that location on the mall.

Finally, he said it couldn't be done, but what he could do was get money for a wing on the AFIP. So, on a Saturday morning, I was with Quinn in his downtown office, and I called up Joe and explained the situation to him. Luke Quinn knew exactly what it cost to construct NIH buildings, because he'd done his role in getting money for a lot of those. I explained to Joe that we could replace the space of the museum with a new wing at AFIP, and Joe said, "Well, okay, add on a couple hundred thousand dollars extra and go for it." So we requested, \$7,570,000, which wouldn't build much nowadays, but was enough then to build a substantial wing on the AFIP.

So that's some of the background, but there's still more to it than that. The DOD official position had to be that they didn't need a new building, they didn't have to request new money. So that Luke Quinn had to push this, against the wishes of the Department of Defense, to get the money to add a wing on the AFIP. And Joe Blumberg was in the position, apparently, as director of AFIP, where he had to testify that no, they didn't really need the wing on the building. Well, that upset Quinn very much, of course, and I could understand that. Although I regarded Quinn as a very exceptional person myself, those feelings, I guess, weren't shared by everyone at AFIP, because he was critical, somewhat openly, of Joe Blumberg for the stand against the new wing at AFIP he had taken. A couple of years after I had left Washington, Quinn died, and the only person from AFIP that attended his funeral was my former secretary, Joyce Garris.

But the interaction with Congress was, to me, a very interesting experience.

Q: I wonder, could we talk a little more about the museum? As a young lad I went there, in the late thirties, and was fascinated by that museum. It was on the Mall and it was one of the places that everybody who went to Washington saw, the way they see the Air and Space Museum today. Moving it to Walter Reed has basically taken it out of the tourist circuit, and it means that medicine is not represented. Military history is represented, aerospace is represented, art is represented, anthropology is represented. But medicine per se, with all its influence on the youth of America, as far as pursuing careers, support of medicine, has been shunted off to the side, because of the circumstances you were telling me about. When you were working in AFIP, how did you view the museum? Was this something you thought about much, or was this just somebody else's business?

DR. STOWELL: I personally thought it was quite important but it was administered efficiently outside my main areas of personal contact.

As you said, the museum was very popular, and they used to keep track of the number of visitors. They noticed that on Sundays the attendance went up. Well, they found out the reason: it was the only open restroom facilities on the Mall, and so they had a lot of Sunday visitors.

But I didn't personally have a lot to do with the museum. Your analysis is correct, that being moved away from the Mall and away from the areas in which the tourists were, the attendance fell off markedly. As you probably know, they hope now to eventually get another health museum building on the Mall, or someplace close to it, and to orient the museum a little more toward general civilian medicine than it has been in the past. It has a lot of very interesting and unique materials there, and it'll do much better when they can get it back in an area near, or on, the Mall.

In connection with working with Quinn, he felt it was important that we contact civilian pathologists for their support, to get them to write to their congressional representatives, particularly those in the areas in which these congressmen were on important committees. We had a friend named Jim French, who was a professor of pathology at the University of Michigan, who was very cooperative. I couldn't sign letters and send them out to civilian pathologists asking them to write their congressmen, because of my position, but Jim French said, "Sign my name to anything you want. I'll be glad to help the AFIP any way I can." So I would draft letters, at Quinn's suggestion. On a Saturday, we'd start out with maybe half a dozen volunteers, who were civilian staff of AFIP, and it would keep building up. They'd pick up the phone and say, "Mary, can you come on down and help us? We're trying to save the old museum building for AFIP." And we'd end up with about two dozen people in there. Joe Blumberg would walk by and say, "Hmm, I see nothing. I hear nothing. Just keep up the good work." We'd end up getting together hundreds of letters. We used the AFIP press, which of course no one was supposed to know about, to run these letters off, and we used American Registry of Pathology postage. And at the end of the Saturday, I'd divide the letters up to people going to all far parts around the Washington area, so nobody could figure out exactly where they came from. We had several series of letters that went out and they were quite effective, because, at the Congressional hearings I would hear the representatives say that they'd been surprised by the amount of mail they'd been getting about this, and what an important place AFIP really was.

I also arranged to get certain leading pathologists to testify before Congressional committees, and wrote out suggestions of things that they should say that would hopefully impress the people in the right way.

So I got a fairly liberal education as to how some things operate in Washington.

Q: Did you or Quinn find any congressmen or senators who were particularly helpful, or particularly obstructive, on this as you dealt with it? Are there some that stick out in your mind?

DR. STOWELL: Well, Quinn had a very good relationship with a representative from Rhode Island, who had worked with him on a lot of things as far as NIH was concerned. Unfortunately, he died in the early phases of this and we weren't able to get his help. I'm not able to suggest any specific names, although I know that when Ken Brinkhous testified, his Senator Sam J. Ervin from North Carolina came in and introduced him, which introduced me to a new technique. Ervin knew all the people on the committee, of

course, and they all respected him very much, and he said, "I want to introduce you to my outstanding colleague, Dr. Brinkhous. He has some very important things that he wants to tell you about. And I appreciate your help in any way you can." I used that technique myself later with Congressional committees. It's effective.

Well, to come back to UAREP. Things worked very well at UAREP. UAREP was willing to sign checks for anything that the AFIP registry wanted to buy. And the members of the UAREP Board of Directors acted as principal investigators on the grant applications, because the military people, and even the AFIP civilians, couldn't very well apply to NIH in their own name at that time. So one of the directors at UAREP would be the principal investigator on the grant, and UAREP would handle the dispensing of the funds as requested by AFIP staff.

This worked quite well until General Taylor became Army surgeon general. I had worked with General Taylor when he was the deputy in the Army Research and Development Command, and he had told me that he just didn't like the AFIP, that we were just doing too much for civilian medicine, and we weren't operating the way the other Army institutes operated, and the way he thought they should. But we were able to get along okay, until he became surgeon general, and then he decided he was just going to change the AFIP. They were going to cut out all of this civilian nonsense and do much more in the way of military things. And as far as UAREP was concerned, which had been approved by General Heaton as Surgeon General and by Keith Cannon of the National Research Council when it was set up, he was going to disapprove it, and there'd be no more of UAREP handling monies for AFIP.

Well, this was something, again, that AFIP couldn't do much about, because they were under General Taylor.

But the people that were with the registries were very concerned. The American College of Radiology, was very concerned. They had a full-time office here in Washington, and they wanted to find out what they could do to circumvent the things that were going on as far as the registry was concerned. The ophthalmologists were very concerned. One of their leading ophthalmology people was chairman of ophthalmology at Johns Hopkins, and one of his research workers was Arthur Silverstein, who had just accepted a one-year fellowship in Senator Ted Kennedy's office. So he was obviously the logical person to try to do something about this.

Silverstein was a fine scientist and a rather independent thinker. For example, when he was working at AFIP, he'd come in on a Saturday, and the director's parking space was right in front of the building, so if it was empty, he'd pull his car in there. And when the director might happen by later, well, he was unhappy about it.

So a group of the people in the societies sponsoring the registries decided, with the help of Silverstein, to create a new American Registry of Pathology (ARP). And this would be made up of, and backed by, the societies that supported registries at AFIP; their representatives would be its board of directors.

AFIP, up to this point, was not a line-item in the budget of Congress and had never operated really with any particular congressional authority. They were approved by the Department of Defense but had not been approved by any act of Congress. So

advantage was taken of this opportunity to get the AFIP recognized by Congress, and to get its role in civilian medicine recognized, and also to get its role in dealing internationally with pathologists recognized.

And this bill went through. I think they call it a Christmas-tree bill, where they hang something on an appropriations bill. And that was what was done with this, and I think it almost became law before the Department of Defense even knew about it. I think they did become aware of it belatedly, and General Taylor suspected that UAREP was responsible for doing it. And actually UAREP wasn't. Although I was in California I had had some role in it myself, working with representatives of some of these societies.

And the people in leprosy I mentioned, they were very concerned, especially Chapman Binford, for example, who had been there many, many years at AFIP. If the mechanism of getting civilian money for the registries had been destroyed, all of his lifetime's work would have been in serious trouble, so he was very concerned and served as a behind-the-scenes coordinator and expeditor of the efforts of many. In fact, he served as a volunteer, initially, as the executive secretary of ARP for a number of months, and then we paid him a small stipend for his part-time efforts. In 1976-78 as the first vice president and in 1978-79 as President of the American Registry of Pathology, I worked with Chapman Binford, as well as with the people who subsequently succeeded him when we got Ken Earle to be the full-time executive secretary of ARP.

Well, this was, to me, another interesting episode at AFIP, where we had to get Congress to do something, and it really made a step forward. UAREP still has kept the editorial office, and support of the editorial office of the Atlas of Tumor Pathology but the printing and sale and distribution is handled through the American Registry of Pathology.

Q: How did Taylor, the surgeon general, react when this went through Congress?

DR. STOWELL: I was told he was very upset, initially. I had no personal contact with him at that time.

When we started out with plans for this new registry, Silverstein didn't ask me for a lot of details about things. He just assumed that UAREP would just go out of business, that this was the only thing they were interested in (which wasn't so), and that all the money that UAREP had would be transferred over to the new registry. Well, that wasn't so, either. So the new registry had no funds initially, except it went to these various societies and asked for some monies. So we had a very limited operating budget at first. And now it's built up to where, recently, it has an even much more important role as far as AFIP is concerned.

I continued to have contact with AFIP after leaving there, not only through the ARP and UAREP but also as chairman of a committee of the International Academy of Pathology that was sponsoring the AFIP Registry of Geographic Pathology.

One of the things I worked on when I was at AFIP was expanding the international basis of cooperation, particularly in research, at AFIP. We did not have a lot of money for this, but we did establish a liaison with the Veterinary Research Laboratory

of South Africa, where the Air Force veterinary people for a long time had a person assigned there full-time. We also had liaison for a period of time with the SEATO (Southeast Asian) Laboratories in Bangkok. We had Dan Connor in Nairobi, Africa, where he worked for a couple of years. And they had contacts where missionary physicians, for example, would see things in Africa or some other parts of the world and they would send specimens to AFIP for diagnosis.

Well, those are some of my recollections.

Q: Well, just a few questions here. While you were dealing with this, in this '59 to '67 period, did you get concerned about the questions that Taylor raised, which must always occur, and that is, the military use? Did you try to nudge some of the research into channels that were particularly pertinent to the military? One, because it was the Armed Forces Institute of Pathology, but the other was almost sort of the politick thing of saying we've got these generals and all who look at our organization and we'd better show them something that makes military sense.

DR. STOWELL: Yes, obviously the military directors of AFIP would have this on their minds, as well as other military. We did. I mentioned the laser research, and this was something in which, in my conversations with the Army Research and Development Command, I would ask them, "Do you have things you'd like us to work on?" Well, they wanted somebody to work on lasers. It was new, they didn't know what the effects would be, they might use it in warfare.

Q: And this was part of the science-fiction type thing, this was going to be perhaps a death-ray type thing, wasn't it?

DR. STOWELL: Yes, and they wanted to know more about it. So we initiated a research program. We sponsored a national conference on the biologic and clinical uses of the laser, held it at AFIP, and published the results. Then another group took that over.

Q: What was your estimation of the laser at the period you were dealing with it at the AFIP?

DR. STOWELL: Well, at that time, I didn't see where I thought it could be a highly effective mobile type of weapon. I guess the Russians did a lot of work with it, and presumably their interest in it was from a military point of view, so it may have some military applications now, but I didn't see where it did then.

The Army was interested in malaria, so we developed programs in malaria.

I mentioned geographic pathology; they were interested in this because we would have people go to certain areas of the world where the Army didn't know what diseases occurred there. If our troops have to go there, what are they going to encounter? So this was something that they were interested in, to a reasonable extent.

They have, of course, military research laboratories, the Navy has several, the Air

Force used to have one or two. The one in the Philippines at Clark Air Force Base, I'm sure is closed now. We made some attempt to cooperate with them, but it never really worked out too well because they have their own chains-of-command and their own way of handling things.

But, yes, certainly we were looking for things of potential military importance, particularly where we could do something that others couldn't do.

Q: What about things such as airplane crashes, tank casualties, this type of thing?

DR. STOWELL: Well, on the airplane casualties, Frank Townsend set up a program in this when he first came to AFIP, with the cooperation of the Air Force. Initially, they were the only group nationally that was set up to look at the human aspect of air crashes. And they had teams organized that would go out anyplace in the country, and even overseas if needed, to assist in investigation. Now, I think other groups are set up to handle the investigation of civilian air crashes, but I'm sure they still do, particularly for the military. If they have a military plane crash somewhere, AFIP is likely to be one of the contributors to looking into the situation, particularly from the human aspect.

We had a program, which was not big, on ballistic missiles. One of the things we put into the new wing at the AFIP was a rifle range, where the effect of missiles and whatnot could be studied. The program on this was rather small, but we were looking for things of that kind.

Now, I don't happen to know so much about the situation on tanks. I think probably the same people who might work on the aircraft accidents might, on some kind of tank accidents, work on that along with the Edgewood Arsenal.

Q: Talking about the international side, did you find that you were getting much in the way of information from other institutes around the world, including the Soviet Union, that was particularly pertinent? Was there a good network, or did you feel that you were doing what you were doing, and you were, in a way, quite far ahead of everybody for what you were concentrating on, so that you really didn't get much feedback from other places?

DR. STOWELL: I don't think it was the fact that we were so far ahead of everyone else, it was more political or human nature problems, I think. We had essentially no contact with the Russians, although Kash Mostofi and I did go there subsequently, and we established some contacts with some of the civilian institutes as far as cancer research was concerned. We had sort of theoretical contacts with the other military research laboratories in other parts of the world. We would like to have had more, but from their point of view, I don't think they felt they needed it. We had contacts with some of the military and civilian research places in England and places like that, where we would visit, and they would visit us when they came, but we didn't really get the high degree of coordination that one would theoretically desire to get. And it wasn't that we didn't want it, but they had their own method of operation, and I guess we weren't in a position to

give them a lot that they couldn't otherwise get.

Q: At the time you were dealing with it, did you get much in the way of the referrals from civilian medicine, or was that pretty much somebody else that handled that?

DR. STOWELL: I did not get that myself. Dr. Elson Helwig was the civilian who was in charge of the consultation service. I had my hands full with other things, so the materials weren't sent to me, they went to other people.

Q: What did you feel was the spirit at the time when you were there? Was it one of collegiality with Dr. Helwig and other departments? Or were you sort of chairing things? Or was it basically you were busy, you had a lot on your plate and so did others, and so you kind of went your own way?

DR. STOWELL: Human nature being what it is, of course, some people always get along better with some people than others do. There were a few very outspoken individuals who would tell almost anybody that they didn't think they were necessary and they could get along very well without them, and that they should keep their nose out of their business. But those were very few, and I didn't have what I would regard particularly as problems. Now if you have hundreds of people working in a place, there are going to be some of them that are going to be complaining. And there were some complainers there. There were people that complained about the military command and the way the military operated. But I didn't think there was an undue amount of this.

Q: Looking at this, you had worked in the university system, which also has its detractors about university politics, and then the military system, how it's done by the numbers, can you do a little comparing and contrasting as you saw it at that time?

DR. STOWELL: Well, it's certainly different, and you've alluded to how some of the differences relate. I was able to work reasonably well, I think, in both situations.

One of my reasons for going to AFIP was that although I had volunteered for the Army, I was not accepted so I never had any military service. I hadn't served my country through the military, and I felt that I should.

After eight years, I thought, well, maybe I had done my share and someone else should have a chance to make their contribution. And the frequency with which I was receiving inquiries as to whether I'd be interested in a university position was starting to decline a bit. So I decided that before they declined much more, I'd better make the step back.

And I guess I was a little concerned because a few people had told me that I was doing things that were a conflict of interest, although they were very helpful to the AFIP, and if I did too much of that kind of thing, eventually it might catch up with me.

Q: When you left in 1967, what gave you the greatest satisfaction, looking back on what you accomplished, and also what was your greatest disappointment?

DR. STOWELL: Well, I think the greatest satisfaction came from seeing how certain things developed, seeing the caliber of some of the staff, how some of that had increased. And these were things that I had a part in, but many other people did, too. I think these were some of the satisfactions. And realizing that I had served as scientific director in a satisfactory manner for a very large and important institution, these were points of satisfaction.

Disappointments, I don't know. I think, after a time, the way the military operates can start to wear one down a bit. But I wouldn't be critical of it; they're doing what they have to do and doing it the way they're supposed to do it.

Q: When you left the AFIP, you went where?

DR. STOWELL: I went to the University of California at Davis. They were starting a new medical school, and I thought this was going to be a real challenge. (Which it was.) And the dean there, apparently a very visionary person, a very enthusiastic person, reminded me of Franklin Murphy who had been dean at the University of Kansas when I went there. I had gotten a lot of satisfaction out of working with Murphy, building up the University of Kansas Medical School, and I saw a similar opportunity, where they were starting a brand new medical school. In time, I wanted to be able to look at it and perhaps feel some bit of credit for some of the successes, as well as be faced with the fact that some things didn't go as we hoped they would.

Q: Have you had any contact with the AFIP since you left?

DR. STOWELL: Yes. I mentioned that I was the representative of the International Academy of Pathology to the Registry of Geographic Pathology from 1974 to 1983. And then, as I have in many cases, after you've been an officer in an organization and done what you can, I feel that the best thing to do is step aside and let somebody with new ideas come in and give them a crack at it, versus just staying on. So I had official contact in that way. And informally, at national meetings, I see friends from the AFIP.

One of the things I started when I went there, I reestablished, in a somewhat different vein, a tradition. Before the directors that were there when I was there, General DeCoursey, an Army general, used to go the national meeting of the International Academy of Pathology, and he'd take along a couple of cases of liquor and hold open house in his hotel room, for people to come by and visit. So one of the things I did when I was at AFIP was to establish a luncheon for friends of AFIP to get together at the annual meeting of the U.S.-Canadian Division of the International Academy of Pathology. And that's still going on now. In fact, they're now doing it at annual meetings of two pathology societies. So, in this way, I've had continuing contact with people there.

Since 1983 I no longer was associated with the Registry of Geographic Pathology or the American Registry of Pathology. I haven't made a lot of special trips just to go to visit at AFIP, not for any reason other than that I was busy, I guess. But I maintain

contact with some of the staff.

Q: Do you have any impression, as time has gone on, about the changing role of AFIP in the research area since you've left? Have the universities sort of picked up much of the research that had been done, and are things getting more diffuse, would you say?

DR. STOWELL: Well, I think one of the biggest changes, of course, that has taken place is that now the AFIP through the ARP has started charging a nominal fee for civilian consultations. And the American Registry of Pathology has an important role in terms of handling these monies and using these monies, plowing them back into ways that help AFIP. So this has been a change. In other words, the American Registry of Pathology has grown. They're now hiring more civilians who work at AFIP, or work for things that AFIP would like to have done.

I can't comment very much on the research. I am aware of a few disappointments. For example, I understand one director passed down, the ruling that anybody working with human tissues at the AFIP would have to be certified by the American Board of Pathology. In 1959 I had brought in one very good, well-educated scientist, Gunter Bahr, from Europe where he had never taken American boards. He finally decided to leave AFIP and go back to Switzerland, which to me I think was a loss. Of course, one person out of a total staff at AFIP is not a lot. But he was a very astute and very good scientist, and was doing a lot of work in relation to exfoliated cytology, in which he was a real expert.

Q: What does that refer to?

DR. STOWELL: That refers to looking for cancer in cells that are taken from the cervix or lungs or other body surfaces or fluids.

One thing I'm told by some of my friends is that the military have taken over more of the administration role and are moving the Department of Army civilian employees out of administration areas, because the military feels they can accomplish it better and they want the civilians to have more time for their other activities. And I'm told some of the civilian staff don't appreciate this so much, because they feel they're pretty good administrators, too.

I think probably, and I don't have any figures to back this up, that the military have moved more of their own people into principal positions at AFIP, like being heads of sections and branches. They're also undergoing, apparently, at the present time, a reorganization, in which I'm told that they are combining a number of the things, like the liver branch has been combined with the gastrointestinal branch. And I'm told some of the people don't like this. But some people just don't like change.

Q: Well, Dr. why don't we stop here, do you think?

DR. STOWELL: Okay.

Q: This was excellent.